

In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-21 (Canceled)

22. (New) A navigation system for producing guiding information for a user in a vehicle, the system comprising:

at least one sensor associated with the vehicle;

input data comprising received and compiled information from a plurality of information sources, including local and remote sources and including said at least one sensor;

means for presenting information through a plurality of media;

means for operating on the compiled information from a plurality of said information sources to generate a message format specification that specifies a format for presentation of information related to at least one information object, wherein said specification includes information for retrieval of specified information associated with said at least one information object from local or remote information sources;

means for determining a preferred medium for presentation of information related to said at least one information object in a first format according to said specification, and for determining an alternative medium for presentation in a second format;

means for selecting one of said preferred medium and said alternative medium for presentation of said at least one information object;

means for forming presentation information according to said specification in one of said first format and said second format corresponding to said selected medium, wherein said means for forming presentation information includes means for retrieving said specified information associated with said at least one information object from said local or remote information sources, and

means for output of said presentation information on said selected medium.

23. (New) The system of claim 1, wherein said means for output comprises means for transcoding said message into said second format for presentation on said alternative medium, wherein said second format is different from the original first format specified in the message specification.

24. (New) The system of claim 22, wherein said means for output comprises means for transcoding said message by deleting information considered irrelevant.

25. (New) The system of claim 22, wherein said message format specification comprises directives for replacing at least one information object by a stored abstraction of the object in the form of a graphical image from a symbol database, so as to present a less detailed representation of the information object.

26. (New) The system of claim 22, wherein said information is related to at least one of a vehicle information object, a navigation information object, a user information object and a target information object.

27. (New) The system of claim 26, wherein the navigation information object includes road section objects having at least one of length, service points, road tolls and points of interest.

28. (New) The system of claim 26, wherein the target information object includes a representation of another moving vehicle and said at least one presentation information object includes a representation of an instantaneous route to a meeting place at least fulfilling predetermined characteristics.

29. (New) The system of claim 22, further comprising:
means for determining a system state, wherein said system state identifies messages being processed and allocated to a medium, and messages that have been interrupted, deleted or queued for later presentation; and

means for enforcement of rules applied to the specification of at least one information object and the system state, the rules further being operative to change the system state.

30. (New) The system of claim 29, wherein:

the system state includes allocation of available media to information objects, said change of system state involving a reallocation of at least one medium.

31. (New) The system of claim 29, wherein said means for enforcement of rules generates a request for transcoding of said at least one information object.

32. (New) A method of controlling a navigation system to produce guiding information for a user in a vehicle the method comprising:

receiving and compiling information from a plurality of information sources, including local and remote sources, and including at least one sensor associated with the vehicle;

operating on the compiled information from said plurality of said information sources to generate a message format specification that specifies a format for presentation of information related to at least one information object, wherein said specification includes information for retrieval of specified information associated with said at least one information object from local or remote information sources;

determining a preferred medium for presentation of information related to said at least one information object in a first format according to said specification and an alternative medium for presentation in a second format;

selecting one of said preferred medium and said alternative medium for presentation of said at least one information object;

forming presentation information according to said specification in one of said first format and said second format according to said selected medium, including retrieving said specified information associated with said at least one information object from said local or remote information sources; and

presenting said presentation information on said selected medium.

33. (New) The method of claim 32, further comprising transcoding said message into said second format for presentation on said alternative medium, wherein said second format is different from the original first format specified in the message specification.

34. (New) The method of claim 32, further comprising transcoding said message by deleting presentation information considered irrelevant.

35. (New) The method of claim 32, further comprising replacing at least one information object by a stored abstraction of the object in the form of a graphical image from a symbol database so as to present a less detailed representation of the information object.

36. (New) The method of claim 32, wherein said information is related to at least one of a vehicle information object, a navigation information object, a user information object and a target information object.

37. (New) The method of claim 36, wherein the navigation information object includes road section objects having at least one of length, service points, road tolls, and points of interest.

38. (New) The method of claim 36, wherein the target information object includes a representation of another moving vehicle and said at least one information object includes a representation of an instantaneous route to a meeting place at least fulfilling predetermined characteristics.

39. (New) The method of claim 36, wherein target information in said target information object is changeable in dependence of information in at least one of said

vehicle information object, said navigation information object and said user information object.

40. (New) The method of claim 32, further comprising:

determining a system state, wherein said system state identifies messages being processed and allocated to a medium, and messages that have been interrupted, deleted or queued for later presentation; and

enforcement of rules applied to the specification of at least one information object and the system state, the rules further being operative to change the system state.

41. (New) The method of claim 40, wherein:

the system state includes allocation of available media to information objects;
said change of system state involves reallocation of medium.